



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,472	01/28/2004	Hisaaki Kura	100725-00113	9425

4372 7590 09/29/2004

ARENT FOX KINTNER PLOTKIN & KAHN
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

BINDA, GREGORY JOHN

ART UNIT PAPER NUMBER

3679

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,472

Applicant(s)

KURA ET AL.

Examiner

Greg Binda

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/698,243.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>20040128</u> . | 6) <input type="checkbox"/> Other: _____ |

Priority

1. It is noted that this application appears to claim subject matter disclosed in prior U. S. applications. A reference to the prior applications must be inserted as the first sentence of the specification of this application if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included.

(The attempted amendment in the transmittal letter filed January 28, 2004 was not entered because it does not commence on a separate piece of paper.)

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bensinger et al, US 5,167,583 (Bensinger). Figs. 1 & 2 show a constant velocity universal joint comprising: an outer joint member 1 having an inner periphery provided with three axial track grooves 2, axial roller guideways 15, 25 being arranged on both sides of each track groove; a tripod member 3 having three radially projecting trunnions 5; and a roller assembly 6-8 mounted on each of the trunnions

Art Unit: 3679

5 of the tripod member, the roller assembly being capable of tilting movement (see also “angularly movable” in col. 1, line 18) with respect to the trunnion and having a roller 8 to be guided along the roller guideways 15, 25 in a direction parallel to the axis of the outer joint member 1, wherein each component part of the joint has a softening resistance characteristic value. Figs. 1 & 2 show the roller assembly comprises a support ring 6 mounted on the convex-spherical outer periphery of the trunnion 5; and the support ring 6 has a cylindrical inner periphery 20.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bensinger.

a. Claims 2-4. Bensinger shows a constant velocity universal joint comprising a steel component part, but does not expressly disclose that the steel has a carbon content of 0.15-0.40% by weight and a Vickers surface hardness value (R) falling within the range of $705 \leq R \leq 820$. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have steel having a carbon content of 0.15-0.40% by weight and a Vickers surface hardness value (R) falling within the range of $705 \leq R \leq 820$, since it has been held that where the general conditions of a claim

are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056.

b. Claim 5 & 6. Bensinger shows a constant velocity universal joint comprising all the limitations of the claims but does not expressly disclose one of the component parts comprising a material characterized by carbide in a martensite matrix. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a component part from a material characterized by carbide in a martensite matrix, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

i. Claim 7. Bensinger shows a constant velocity universal joint comprising a steel component part, but does not expressly disclose that the steel has a carbon content of 0.80% by weight or higher. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have steel having a carbon content of 0.80% by weight or higher for the same reason noted in item 'a' above.

ii. Claim 8. See item 'a' above.

iii. Claim 9. Bensinger shows a constant velocity universal joint comprising a component part, but does not expressly disclose the component part within the range of HRC-60-68 surface hardness. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the

Art Unit: 3679

component part within the range of HRC 60-68 surface hardness for the same reason noted in item 'a' above.

-Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Greg Binda
Primary Examiner
Art Unit 3679